

Managing the Ocean

Considerations for marine area planning and governance in Massachusetts

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The Big Picture

" Let the waters below the heavens be gathered into one place, and let the dry land appear"; and it was so.

Genesis 1:9



The Big Picture (more recent)

" He has plundered our seas,
ravaged our Coasts,
... and destroyed the lives
of our people"

Declaration of Independence



What I've been looking at

$R_v \rightarrow \Delta e \rightarrow \Delta v \rightarrow \text{policy response} \rightarrow \Delta r_v$

Some resource R has value v , where some environmental change results in a change in value that prompts a policy response to offset or redress the change resulting in some new (changed again) value of the resource.^[1]

^[1] Freeman, A.M. 1979. *The Benefits of Environmental Improvement* Washington: Resources for the Future.

What I've been thinking

$Rv \rightarrow \Delta t \rightarrow \Delta v \rightarrow \text{law/policy response} \rightarrow \Delta rv$

That is, some public resource R (such as offshore land) has value v , where some technological advancement (e.g. the technical capacity to drill in deepwater areas, the technology to place wind farm towers in offshore areas) results in a change in value that prompts a law policy response to facilitate development/exploitation and garner revenue for the public trustee from the more valuable resource.

What I've been thinking

$R_p \rightarrow \Delta t \rightarrow \Delta v \rightarrow \text{policy response} \rightarrow \Delta r_p$

Some resource R has a legal property characterization (on the public – private spectrum), where some technological advancement (e.g. the technical capacity to drill in deepwater areas, the technology to place wind farm towers in offshore areas) results in a change in value that prompts a law policy response to change the property's legal characterization (offshore public lands with private leases, ITQs/IFQs).

What I've been thinking

My interest in property rights is related to the shifting uses of public/private property and the manner in which those shifts are:

1. shaped by certain historical, economic and legal “influencing factors” (independent variables);
2. prompt changes in public policy; and,
3. affect the public’s legal and economic interest in certain areas/resources.

(the following is meant to be a conceptual rather than quantifiable/economic model)

What I've been thinking

$$OI = f (EF, FV, HU, SO, MO, WV)$$

OI = Ocean Interest (i.e. marine resource's economic and/or legal interest “created” by the federal government by withdrawing an area/resource from use or by assigning a legal interest in a resource/use to a given class of users)

EF = Ecological Function (i.e. the role of the area/resource in the relevant ocean ecosystem(s))

FV = Financial (market) value; HU = Historical Use

SO = Stakeholder Objectives (non-government individual/entity objective – i.e. commercial consumptive, recreational consumptive, commercial non-consumptive, recreational non-consumptive)

MO = Mass Objectives (government objectives, i.e. create sanctuaries, maintain certain industries, provide source of food)

WV = Wild value (i.e. the economic and/or CVM value of leaving areas alone for breeding grounds or sanctuary/refuge purposes)

Ocean Governance Puzzle

Planning/Siting (science-based)

- ◆ Where should you put/allow an activity?

Zoning (law-based)

- ◆ Where can you put/allow an activity?

Permitting (stakeholder process)

- ◆ Where will you put /allow an activity?

Regulating (management/enforcement)

- ◆ How will the site/activity be regulated?

Planning 101

Plan / v. To formulate a scheme or program for the accomplishment or attainment of a goal or objective.

. . . from Latin *planum* – flat or map.

The New Shorter Oxford English Dictionary
(Vol. 2, N-Z) (Clarendon Press, Oxford 1993).

Planning 101

So now you've got to ask yourselves – what objectives should our planning facilitate?

Fast money? Ocean wilderness?
Equitable access? Jobs?

What goals does the state have?

Planning 101

Alternatively, what is the state trying to avoid?

Sea sprawl? Ocean blight?

Planning 101

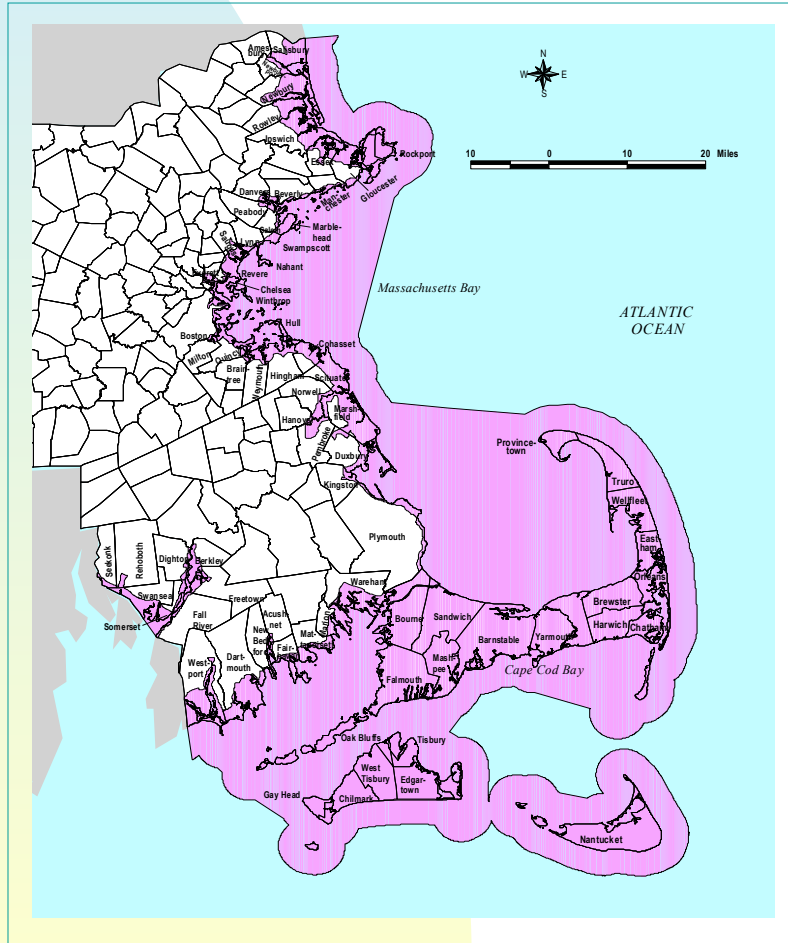
You also need to know:

What's out there?

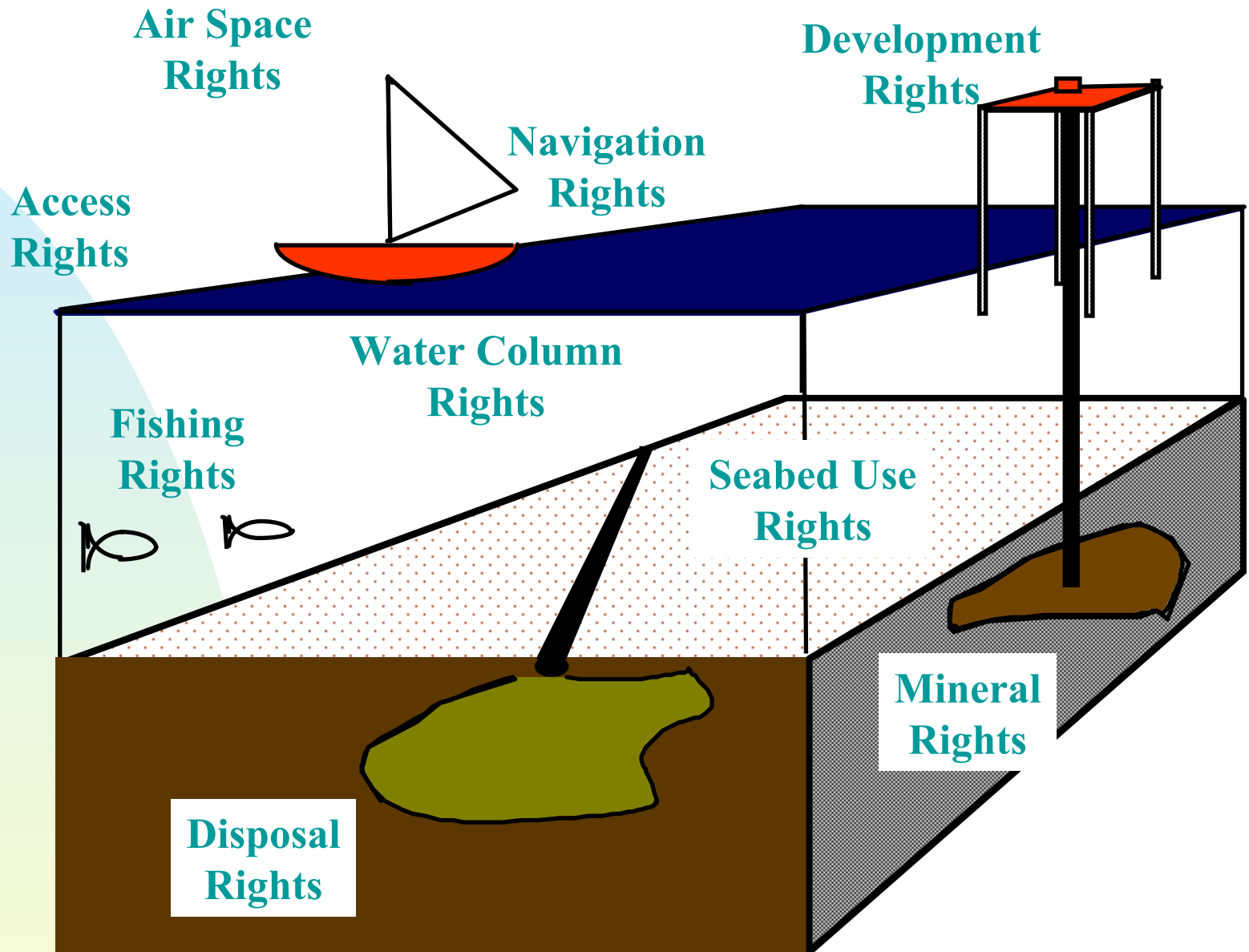
(Which presumes you know where '*there*' is)

Who has jurisdiction?

Where is 'there'?



What's
out
there?



Nichols, S., It's Our Ocean: How Well Will We Govern It? Presented at the Offshore Issues Consultation Workshop. Viewed at <http://gge.unb.ca/Research/OceanGov/documents/LUNCH.PPT> (July 28, 2003).

Regulatory Jurisdiction

Q Who regulates activity in the ocean?

A It depends on:

👉 Location

👉 History

👉 Activity

Location: Federal/State Waters

General Rule (location-based):

“State Waters” = 3 n. miles

“Federal Waters” > 3 n. miles

see Submerged Lands Act of 1953, 43 U.S.C. 1301 *et seq.*

History: Nantucket Sound

In some cases, states have been granted title/authority beyond 3 miles.

Massachusetts made a claim to Nantucket Sound under the doctrine of “ancient title.” The US Supreme Court rejected that claim in 1986.

See U.S. v. Maine, 475 U.S. 89 (1986).

Activity-based jurisdiction

Once you've determined where an activity will be (federal vs. state waters), consider what type of activity is being proposed to determine who has a say in regulating that activity.

Navigation obstructions

ACoE

OCS oil and gas development

DoI/MMS

Fishing

NMFS

Activity and Impact – based Laws

Now determine what type of impact an activity may have to figure out which laws apply

Navigation obstructions

R&HA

OCS oil and gas development

OCSLA

Fishing

Magnuson/ESA/MMPA

For any federal activity that will significantly affect the environment, also consider NEPA, ESA, MMPA

Activity and Impact implications

In some cases,

the feds have a say over activity and impacts in state waters

and

the states may have a say in certain activities in federal waters.

Federal-State Interaction

US federal government maintains certain paramount rights re: activities in all waters (navigation, commerce, security) which may pre-empt state laws

States have some say in activities in federal waters per Coastal Zone Management Act “consistency” determination.

Federal vs State Waters

“State Waters” = 3 miles

“Federal Waters” > 3 miles

Federal-State Interaction

US federal government maintains certain paramount rights re: activities in all waters (navigation, commerce, security) which may pre-empt state laws

States have some say in activities in federal waters per CZMA “consistency” determination.

The age old question . . .

(Which comes first, the chicken or the egg?)

Does Massachusetts plan for ocean resource management or does the state respond to proposed activities?

The answer is ...



YES

Massachusetts employs

***ocean planning* efforts**

as well as

***activity response* efforts**

Mass. regulations governing marine waters

Issue	Applicable Laws	Regulations	Agencies legend & links
Areas of Critical Environmental Concern	MGL c. 21A §2(7) ; St. 1974, c. 806 s. 40(e)	301 CMR 12.00	DEM
Archeology	MGL c. 9 § 26 to 27C	950 CMR 70.00	MHC
Coastal Development or Use	MGL c. 91 ; MGL c. 6A § 2-7 MGL c. 21A, s. 4A	310 CMR 9.00 301 CMR 20.00 to 24.00	DEP CZM
Dredging and Filling (Wetlands and Waterways)	MGL c. 21 § 26-35	310 CMR 9.00	DEP
Emergency Response/ Spill Reporting	MGL c. 21E (State Superfund Law)	310 CMR 40.0000 (Mass. Contingency Plan)	DEP
Endangered Species (Natural Heritage Program)	MGL c. 131 s. 23	321 CMR 10.00	DFW
Environmental Notification Forms/Impact Reports	MGL c. 30 §61-62H (Mass. Environmental Policy Act [MEPA])	301 CMR 11.00	EOEA

Mass. regulations governing marine waters

Issue	Applicable Laws	Regulations	Agencies legend & links
Environmental Results Program	MGL c. 21 § 26-43 ; MGL c. 21C ; MGL c 21E ; MGL 111 § 142A-J	310 CMR 70.00 , 71.00 , 72.00	DEP
Food and Agriculture (Department of Food and Agriculture, includes Animal Health, Dairying and Land Use)	Multiple laws apply. Search the MGL site	330 CMR 3.00 - 28.00 331 CMR 7.00	DFA
Hazardous Waste Mgmt./Transportation	MGL c. 21C (Mass. Haz. Waste Mgmt. Act)	310 CMR 30.000	DEP
Hazardous Waste Site Assessment/Cleanup	MGL c. 21E (State Superfund Law)	310 CMR 40.0000 (Mass. Contingency Plan)	DEP
Historic Preservation	MGL c. 9 §26-27C	950 CMR 71.00	MHC
Industrial Wastewater Pretreatment	MGL c. 21 § 26-53 (Mass. Clean Waters Act)	314 CMR 12.00	DEP

Mass. regulations governing marine waters

Issue	Applicable Laws	Regulations	Agencies legend & links
Marine Fisheries	MGL c. 130 (many sections)	322 CMR 1.00 to 12.00	DFW
Medical Waste	MGL c. 111 s. 127A (State Sanitary Code)	105 CMR 480.00	DPH
Massachusetts Water Resources Authority	St. 1984, 1987 and 1991 (many sections)	360 CMR 1.00 to 12.00	MWRA
Permitting Timelines/Fees	MGL c. 21A s. 18 (Timely Action Schedule & Fee Provisions); MGL c. 21 s. 34A ; MGL c. 21C s. 7 ; MGL c. 21E s. 3B ; MGL c. 21I ; MGL c. 91 § 18, 21 & 22 ; MGL c. 131 s. 40	310 CMR 4.00	DEP
		310 CMR 9.00	
		310 CMR 21.00;	
		310 CMR 50.53;	
		301 CMR 40.00;	EOEA
		801 CMR 4.02 and 4.07	DEP
Scenic/ Recreational Rivers Orders	MGL c. 21A, s. 2(28)	302 CMR 3.00	DEM
Title 5 (Subsurface Sewage Disposal)	MGL c. 21A s. 13 (State Environmental Code)	310 CMR 15.00	DEP BOH

Mass. regulations governing marine waters

Issue	Applicable Laws	Regulations	Agencies legend & links
Water Pollution Control	MGL c. 21 § 26-53 (Mass. Clean Waters Act)	257CMR 2.00 310 CMR 41.00; 314 CMR 1.00 - 15.00 314 CMR 4.00 314 CMR 9.00	DEP
Water Resources Commission (WRC)	MGL c. 21 , 21A , 30A (many sections)	313 CMR 2.00 to 5.00	WRC
Waterways Licensing	MGL c. 91 (Public Waterfront Act)	310 CMR 9.00	DEP
Wetlands	MGL c. 131 s. 40 (Wetlands Protection Act) MGL c. 258, Acts of 1996 (Rivers Protection Act)	310 CMR 10.00 310 CMR 13.00	DEP , CC

Looking to the Land

Ocean areas are public property and accommodate a wide range of public and some private uses.

Before considering zoning then, consider non-zoning public land management models.

Ocean Management

In the US, ocean areas are delineated on a jurisdictional basis and sometimes on a use basis.

Ocean Zones

Jurisdictional zones:

Coastal zones (vary by state)

Internal Waters

Territorial Sea

Contiguous Zone

Exclusive Economic Zone

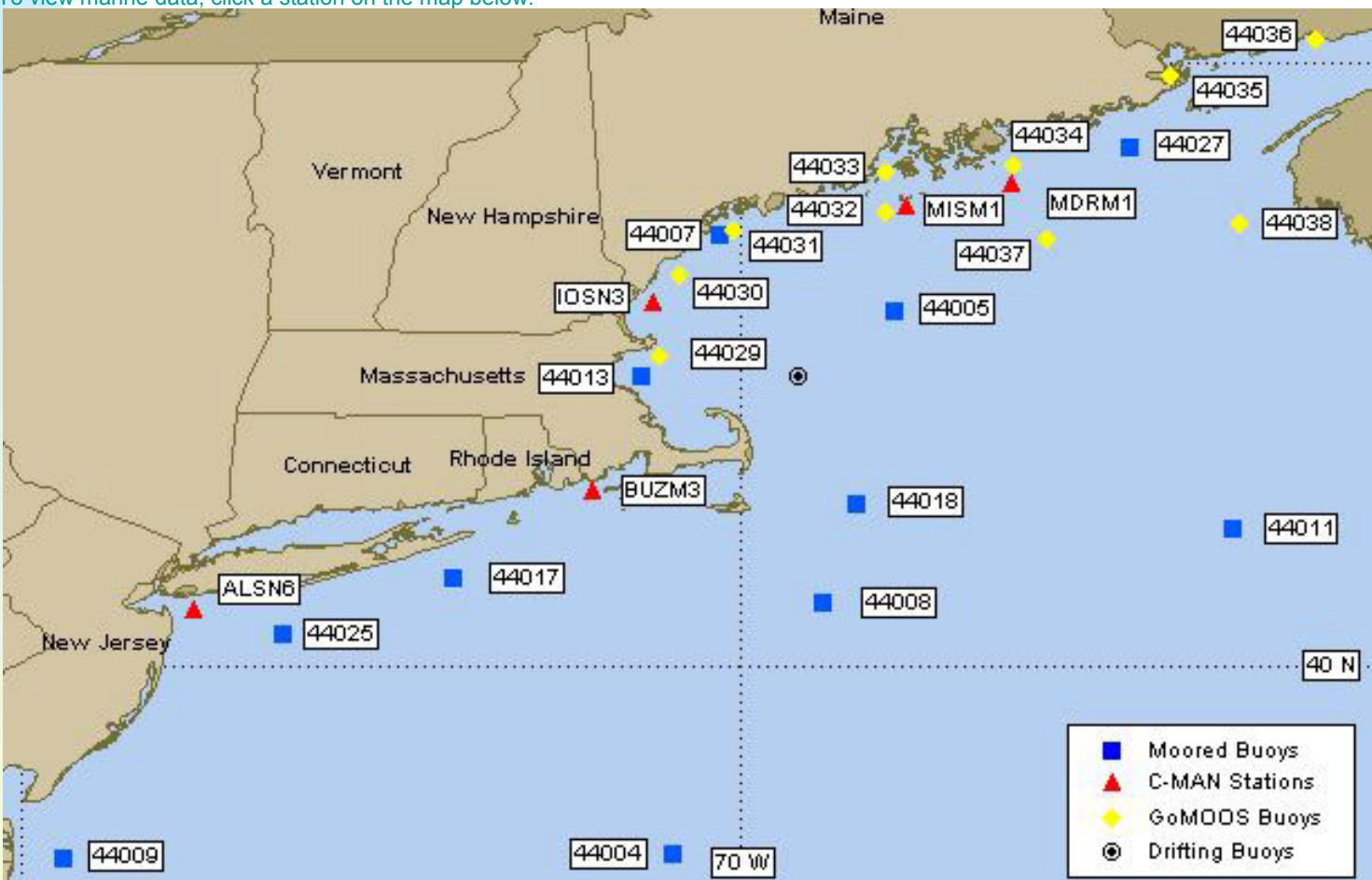
Land/Ocean planning maps

Some examples

NOAA Charts – to plan a voyage/avoid a wreck

DOI/MMS Charts – to identify lease tracts

Federal Lands map – to plan multiple uses



U.S. Dept. of Commerce National Oceanic and Atmospheric Administration
National Weather Service National Data Buoy Center

Zoning 101

Zone / v. Divide into areas subject to particular planning restrictions; designate a specific area for use or development in this area.


Also *US* (foll. by *out*), forbid (the siting of an enterprise) in a given area.

The New Shorter Oxford English Dictionary
(Vol. 2, N-Z) (Clarendon Press, Oxford 1993).

Zoning 101

Reasons for zoning:

Protect human health and environment;
Lend stability to ownership expectations;
Reduce nuisance claims; and,
Plan infrastructure



**We zone much of the land
but very little of the ocean**

What's the Difference?

Q What's the difference between the ocean and the land?

A Property interests!

Zoning is used to plan/regulate private activity on private property.

Looking to the Land

Ocean areas are public property and accommodate a wide range of public and some private uses.

Before considering zoning then, consider non-zoning public land management models.

Land models

Twenty-nine percent of the land mass of the US is owned by the federal government

Public Land Management

In the US, federal public land use is designated through a **withdrawal** and/or **reservation process**.

Federal Public Land Management

Federal Land Policy and Management Act 43 USC 1701

Don't sell public lands, do inventory them

Plan for present and future use

Establish rules and regulations after considering views of general public;

Establish goals & objectives as guidelines for public land use planning,

Manage on basis of multiple use and sustained yield

Manage to protect scientific/scenic/historical/ecological/environmental/
air & atmospheric/water resource/archeological values;

Preserve and protect certain public lands in their natural condition;

Obtain fair market value of the use of the public lands and resources

Public Land Management

Some public land is **withdrawn** from certain activities, e.g. forest land may be withdrawn from oil/gas leasing activity.

Public Land Management

Some public land is **reserved/designated** for certain activities, e.g. national parks, wildlife refuges, forests.

Private Interests / Public Land

Some public land is used for private purposes:

- Timber harvesting
- Oil/gas development
- gold mining

Private Interests / Public Oceans

Some public ocean space is used for private purposes:

- Oil/gas development
- sand/gravel/mineral mining

Exclusive Use of Ocean Space

Transit use

Commercial
shipping

Recreational
boating

Fishing

Swimming

Short term temp

Lobster Pots

Fishing gear

Anchorage

Long term temp

Aquaculture

Moorings

Casinos

Permanent

Wharves

Navigation
Aids

MPAs

Marinas

Privatizing Ocean Rights

- **Q: What are the private property law elements?**
- *A: Those of you who have owned real estate, know what the basic elements of private property law are --*
 - *title*
 - *right to eject*
 - *right to transfer*

Should we privatize the ocean?

To some degree we already do?

Consider the elements of private property:

- Exclusive use

- Right to exclude

- Right to transfer

Right to exclude

- Can you just walk into/sail into any yacht club?
- Do you have to avoid a dive flag?
- Can you cross a shipping channel on a jet ski?

Transferability

Can you transfer your use interest?
(This is the money question)

Transferability = marketability = value

The big question:

If you have use of the area, why do you need
identifiable quantifiable value, i.e.
why do you need transferability?

Financing!

Can you own the ocean?

In the United States, ocean space is considered public space open to use for a wide range of purposes including fishing, navigation, and commerce.

Pros and Cons

Increased value warrants
increased lease fees;

inefficient leaseholders
motivated to transfer to
more efficient;

financing institutions
increase lending

Control shifts from
state to leaseholder

State/fed government
lose “relationship” with
lessee upon transfer

Presumes type of use
is best for some fixed
term

Can you zone what they own?

Q: If ocean areas are conveyed to private interests can they be “zoned” ?

A: Yes. Zoning is a “police power” held by the state and federal governments to protect the health and safety of the public.

Who can zone?

Federal government (e.g. D.C.)

States

Municipalities and agencies
conferred authority by state.

Who is doing it?

Maine cities/towns re: moorings and harbor management

Edgartown, MA Surface Water District

National Marine Sanctuaries

What does your state/province do?

How do states do it?

Maine harbors: Title 38 MRSA authorizes towns to manage harbors in accordance with state guidelines.

Edgartown, MA Surface Water District: MGL c. 40A

NJ state land management agencies: state law authorizing marine conservation zone authority

Visit us on the web

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